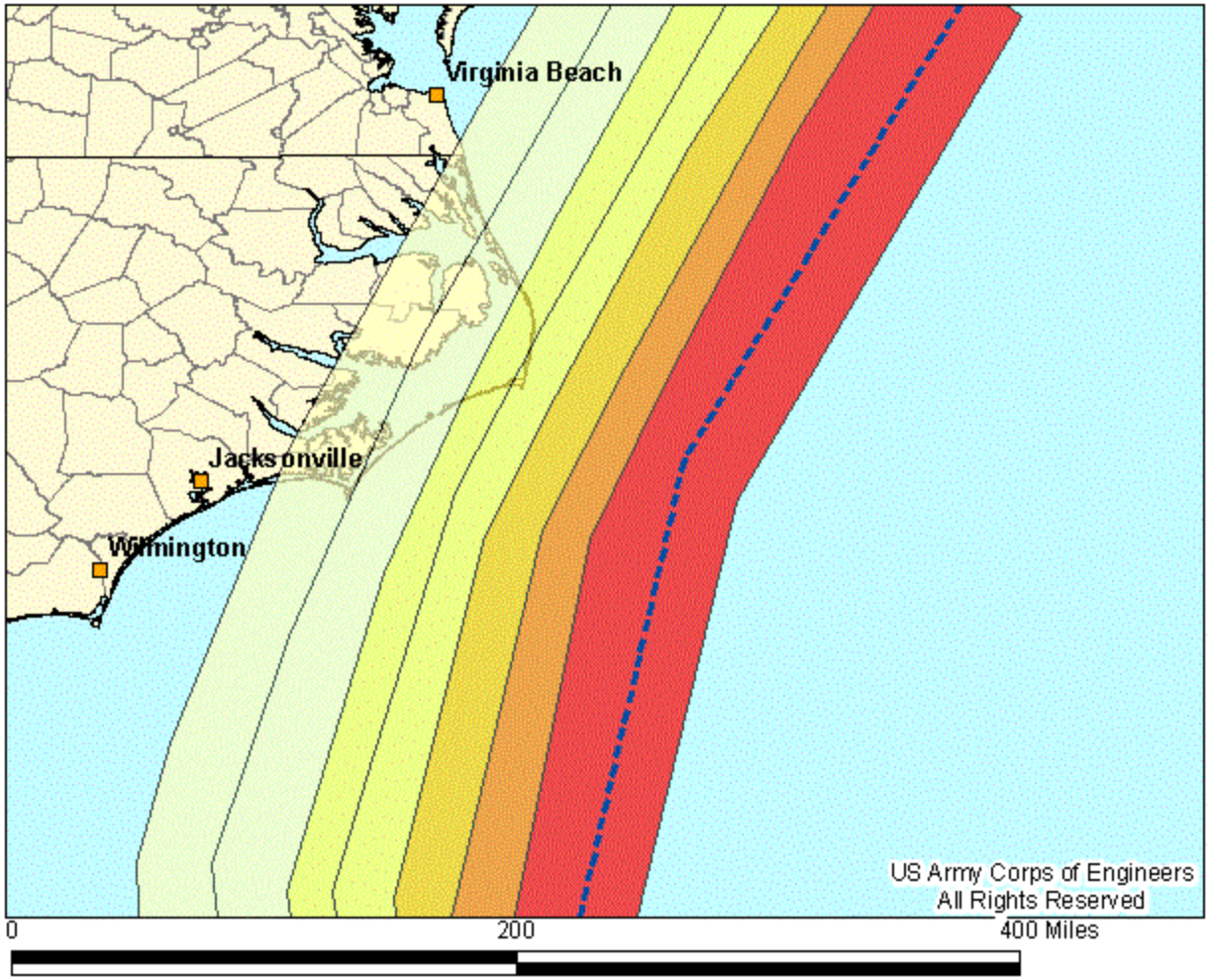
US Army Corps of Engineers

# Hurricane Earl Projected Damage Areas

## Landfall Expected In About 20 Hours

**For Planning Purposes Only!**




***Post Landfall Projected Damage Areas***

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Projected Damage Areas**

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Earl Projected Damage Areas**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

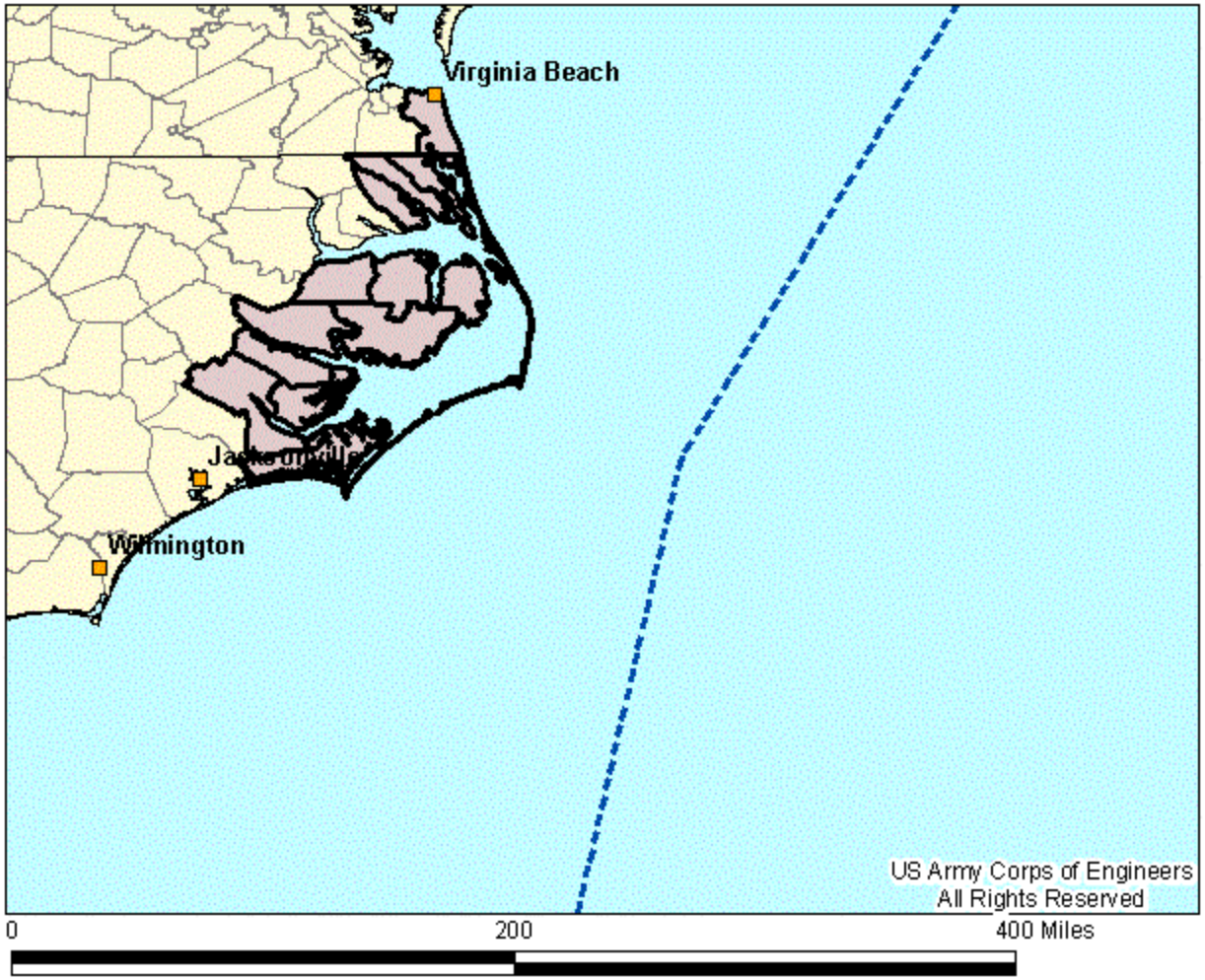
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Debris Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Post Landfall Debris Model Results*

North Carolina - 170,000 Yards
Virginia - 2,000 Yards

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Debris**

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Earl Debris Model | |
|---|---|
| **Generated By:** Siemsen, LRL 0700 EDT 09/02/2010 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 2 of 14 |

US Army Corps of Engineers

# Hurricane Earl Debris Model

## Landfall Expected In About 20 Hours

**For Planning Purposes Only!**

| State | Yards per State | County | Yards per County |
|---|---|---|---|
| North Carolina | | Beaufort County | 2,000 |
| | | Camden County | 7,000 |
| | | Carteret County | 46,000 |
| | | Craven County | 12,000 |
| | | Currituck County | 13,000 |
| | | Dare County | 54,000 |
| | | Hyde County | 15,000 |
| | | Pamlico County | 10,000 |
| | | Pasquotank County | 4,000 |
| | | Tyrrell County | 7,000 |
| | | Washington County | < 1,000 |
| North Carolina | 170,000 | | |
| | | | |
| Virginia | | Virginia Beach city | 2,000 |
| Virginia | 2,000 | | |

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

**Hurricane Earl Debris Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

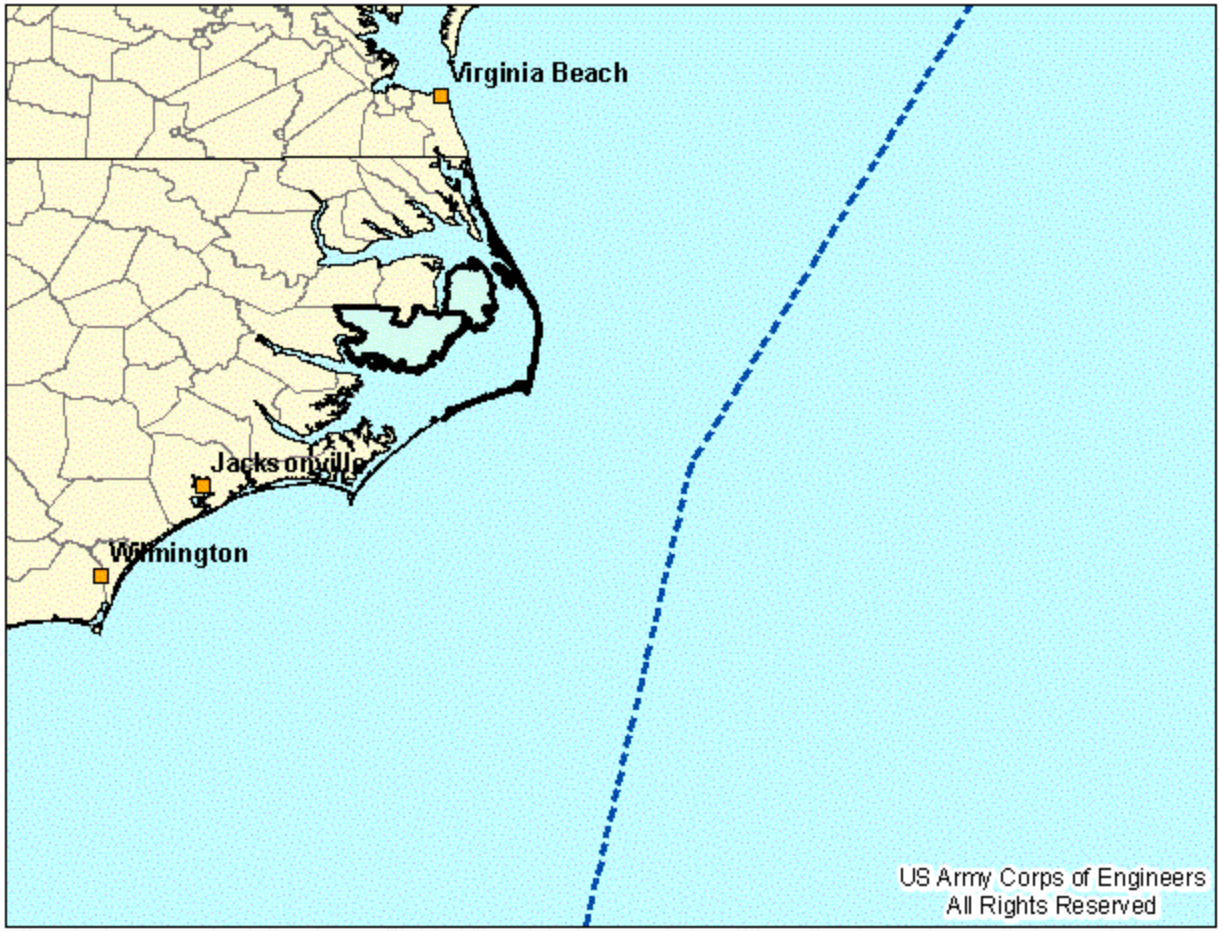
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Commodities Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Post Landfall Water Model Results*

**Day One / Day Two / Day Three**
North Carolina – 1/1/2 Truckloads

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Commodities**

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC ***(0500 EDT 09/02/2010)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Earl Commodities Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Commodities Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**

| State | Truckloads per State | County | Truckloads per County |
|---|---|---|---|
| North Carolina | | Dare County | 1 |
| | | Hyde County | 1 |
| North Carolina | 2 | | |

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Earl Commodities Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

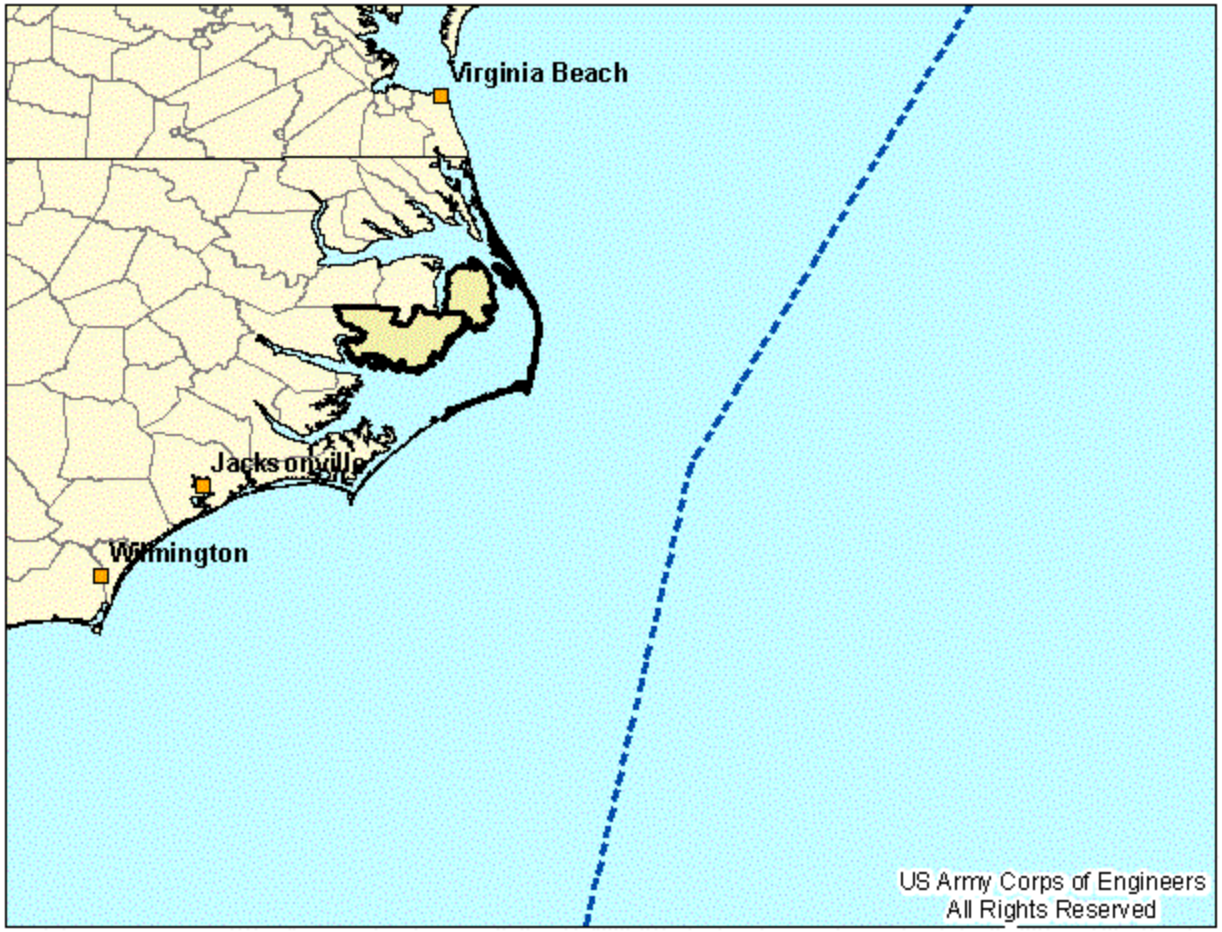
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Temporary Roofing Model

## Landfall Expected In About 20 Hours

**For Planning Purposes Only!**




### *Post Landfall Temporary Roofing Model Results*

< 100

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Temporary Roofing**

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast. Temporary roofing is based on 2% in CAT 1, 5% in CAT 2, 8% in CAT 3 and 12% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Earl Roofing Model | |
|---|---|
| **Generated By:** Siemsen, LRL 0700 EDT 09/02/2010 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 6 of 14 |

US Army Corps of Engineers

# Hurricane Earl Temporary Roofing Model

## Landfall Expected In About 20 Hours

**For Planning Purposes Only!**

| State | House Units per State | County | House Units per County |
|---|---|---|---|
| North Carolina | | Dare County | < 100 |
| | | Hyde County | < 100 |
| North Carolina | | | |

Temporary roofing is based on 2% in CAT 1, 5% in CAT 2, 8% in CAT 3 and 12% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

**Hurricane Earl Roofing Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

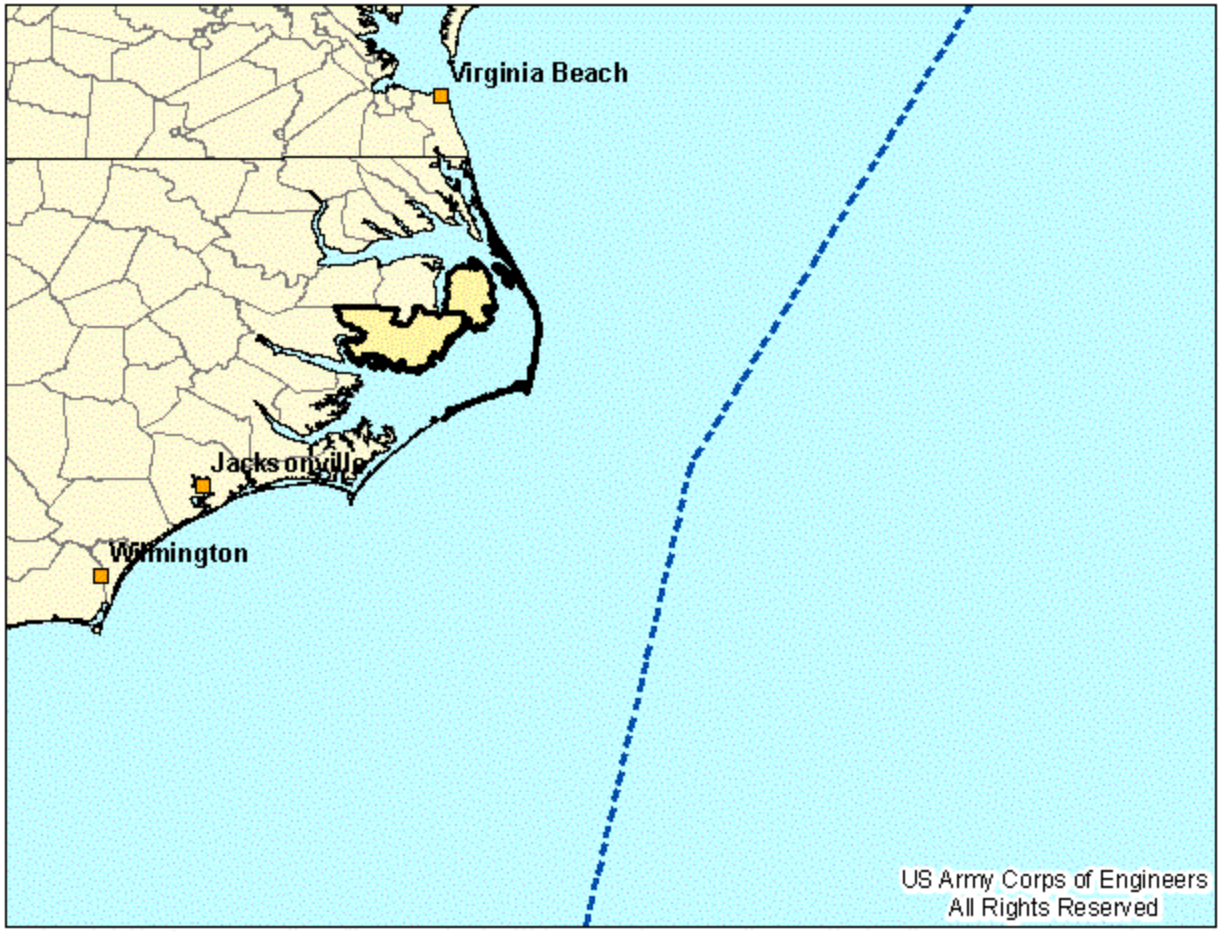
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Population Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Post Landfall Population Model Results*

< 1,000

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Population**

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2008 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Earl Population Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Population Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**

| State | Population per State | County | Population per County |
|---|---|---|---|
| North Carolina | | Dare County | < 1,000 |
| | | Hyde County | < 1,000 |
| North Carolina | | | |

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2008 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

**Hurricane Earl Population Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

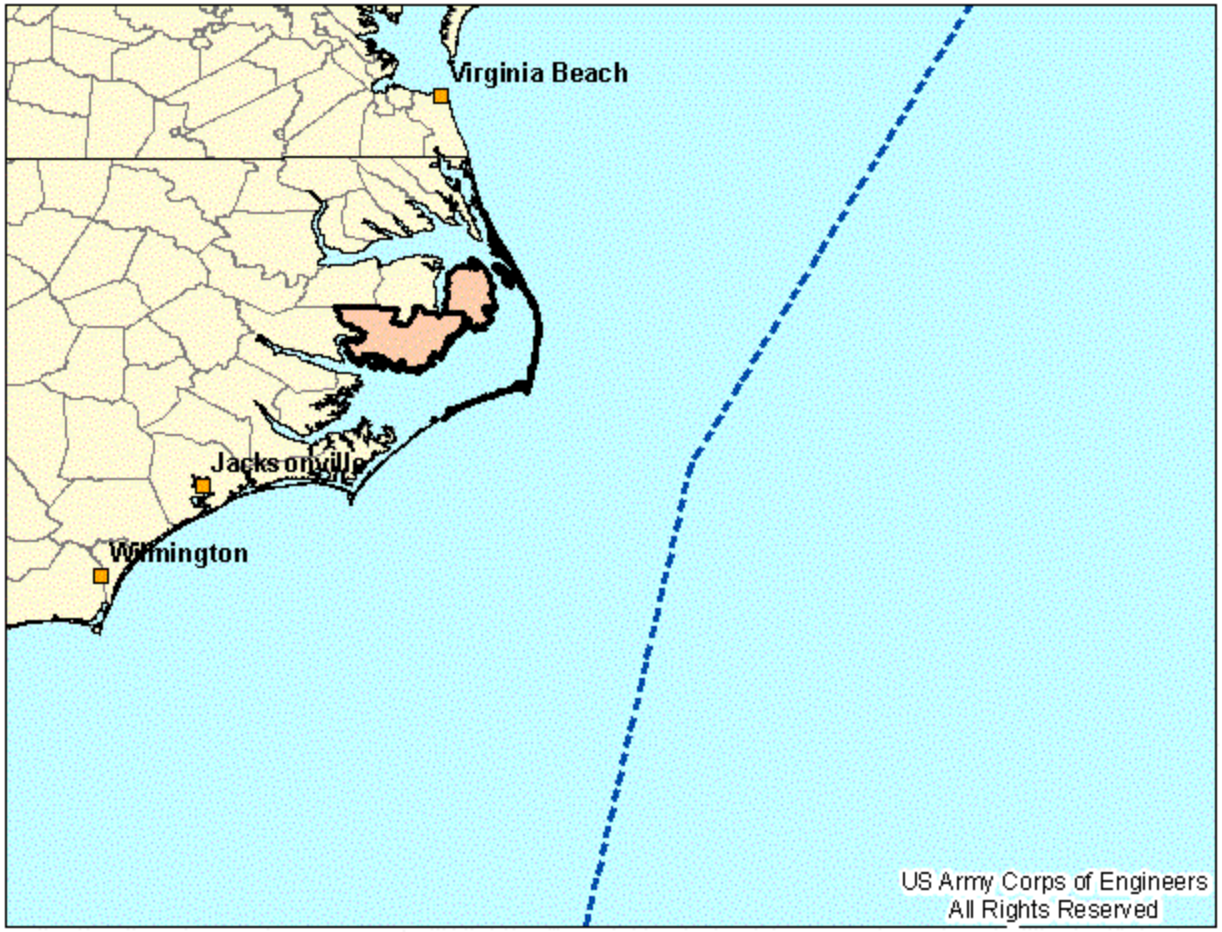
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Households Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Post Landfall Households Model Results*

< 1,000

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

Forecast Track
Historic Track

**Households**

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2008 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Earl Households Model | |
|---|---|
| **Generated By:** Siemsen, LRL 0700 EDT 09/02/2010 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 10 of 14 |

US Army Corps of Engineers

# Hurricane Earl Households Model

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**

| State | Households per State | County | Households per County |
|---|---|---|---|
| North Carolina | | Dare County | < 1,000 |
| | | Hyde County | < 1,000 |
| North Carolina | | | |

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2008 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

**Hurricane Earl Households Model**

**Generated By:**
Siemsen, LRL 0700 EDT 09/02/2010

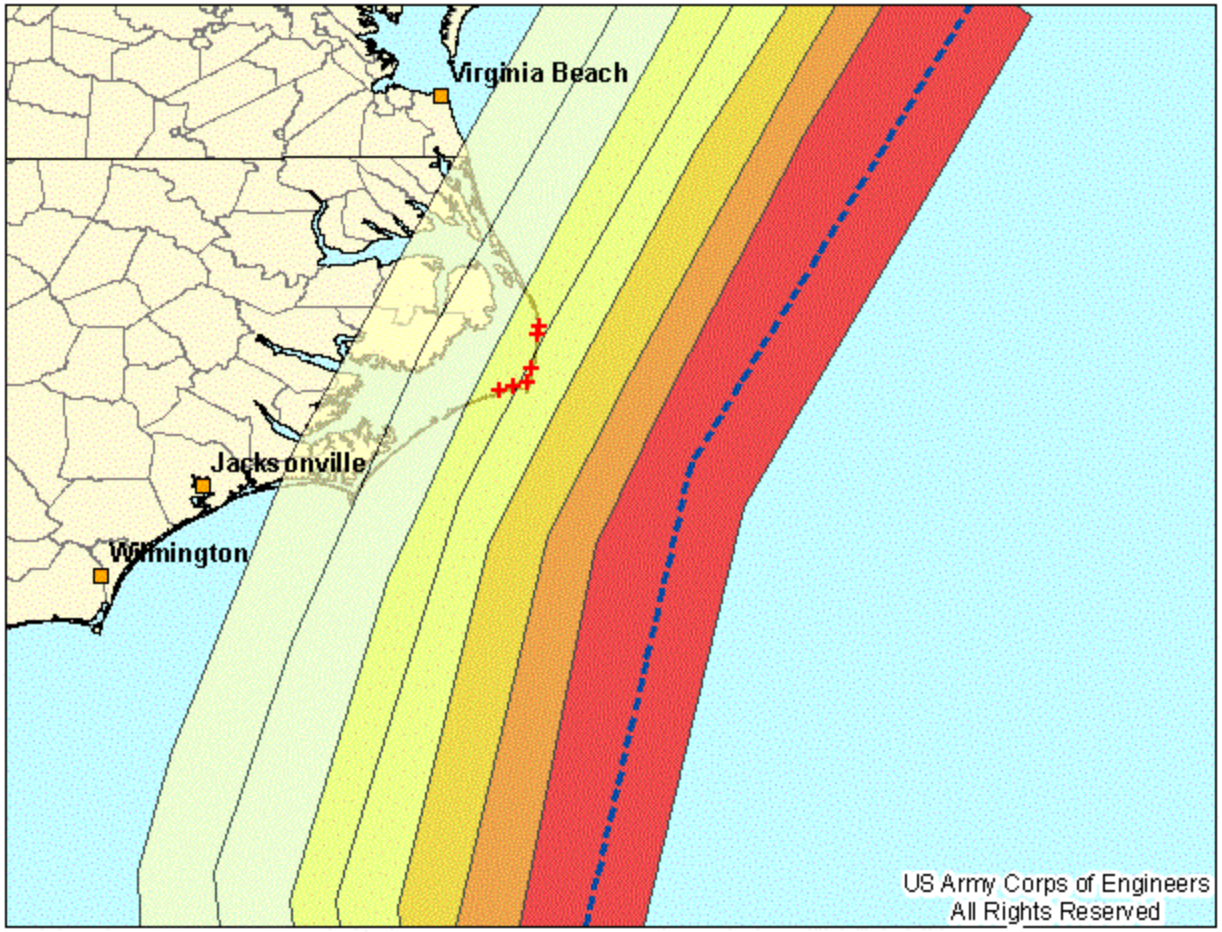
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Earl Fire Stations

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Most Probable Landfall Fire Stations Inside Hurricane Force Winds*

North Carolina - 6

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

+ Fire Stations
Forecast Track
Historic Track

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

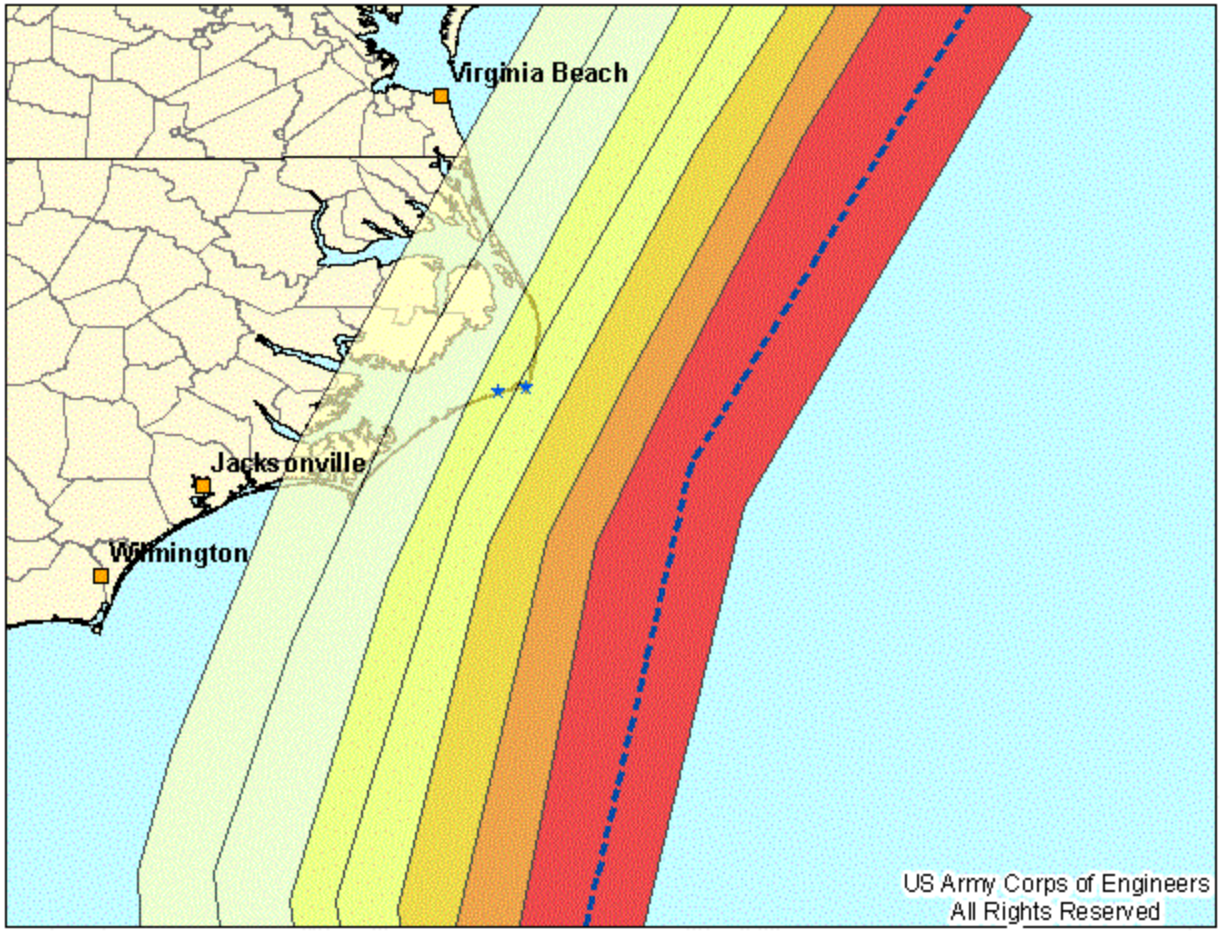
| Hurricane Earl Fire Stations | |
|---|---|
| **Generated By:** Siemsen, LRL 0700 EDT 09/02/2010 | |
| **Sources:** HURREVAC LRL-DEBRIS |  |

US Army Corps of Engineers

# Hurricane Earl Law Enforcement

## Landfall Expected In About **20** Hours

**For Planning Purposes Only!**




### *Most Probable Landfall Law Enforcement Inside Hurricane Force Winds*

North Carolina - 2

*Model results per County on following page*

This model is based on a Category 4 storm making landfall near Outer Banks, NC.

★ Law Enforcement
Forecast Track
Historic Track

Information provided on this page displays a Category 4 storm making landfall near Outer Banks, NC. These projections are based on information from the NHC (0500 EDT 09/02/2010) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Earl Law Enforcement | |
|---|---|
| **Generated By:** Siemsen, LRL 0700 EDT 09/02/2010 | |
| **Sources:** HURREVAC LRL-DEBRIS |  |